Architectural Remains
Unit A, Sub-Unit 39
Jamestown Island, Virginia

HABS No. VA-26

WRITTEN HISTORICAL AND DESCRIPTIVE DATA
District No. VA

Historic American Buildings Survey
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ARCHITECTURAL REMAINS
UNIT A, SUB-UNIT 39
JAMESTOWN ISLAND
COLONIAL NATIONAL MONUMENT
VIRGINIA

Owner: National Park Service.

Date of Erection: 17th century.

Architect: Unknown.

Builder: Unknown.

Present Condition: Foundation only.

Number of Stories: Unknown.

Materials of Construction: Brick.

Other Existing Records: None.

Additional Data: (See following pages).

THE FOUNDATION IN UNIT A, SUB-UNIT 39

Jamestown Island, James City County, Virginia.

FOUNDATION IN UNIT A, SUB-UNIT 39

A. Brick Foundation in Unit A, Sub-Unit 39.

General Description of Main Foundation: The main foundation in Unit A, sub-unit 39 is rectangular in shape, 25'-4" north to south by 36'-2" east to west overall, with a brick paved basement in the entire inside area. A nine inch brick partition runs from north to south dividing the basement into two units, eastern and western, with no circulation between them. The western unit is divided again by a similar brick partition running from east to west and forming two rooms, a northern and southern, which are connected by an opening (doorway).

The eastern part of the basement: This comprisea one room 16'-5" x 22'-4" with an entrance stairway 3'-4" wide on the south side. Along the edges of the treads of the steps and in the square holes in the side walls charred wood still remains. Originally this was a wooden bar (nosing), rectangular in section and customarily put in to protect the edges of the treads from the constant wear. The entire area of this part is paved with brick laid flat in mortar in varied patterns. A shallow brick channel 4" wide and 1" deep is built into the paving to catch and carry the water from along the walls to the bricked drain pit, 7¾" x 11" and 1'-3" deep at the southeast corner of the room. A bricked channel 6¾" x 3' -3½" and 6" deep was found at the foot of the first step of the basement entrance.

The western part of the basement: This comprises two rooms, a south room and a north room.

The south room is 10' -10½" x 16' -1¼" with brick paving of a continuous pattern. The floor of this room slopes toward a brick drain pit in the southeast corner.

The north room is rectangular in shape 10' -9" x 16' - 1½" with an outside entrance stairway on the west side. At the foot of the steps (landing area) the paving is in row pattern (stretchers breaking jointa) while the reat of the room is paved with bricks laid flat in continuous pattern. The walls of the room including the jambs of the south doorway and entrance stairway are plastered. Charred remains of wooden nosing were found on two treads of the entrance steps. Three feet east of the

northwest corner and 2'-8" above the paving an interesting detail of brick work was diecovered. (See photograph No. 13 and drawing detail). The recessed header courses in this wall convey the idea that this may have been the original location of a basement window.

Condition of Brickwork:

Outside walls of main foundation: The width of the main walls varies from 1'-6" to 1'-7" because of the irregular size of the hand-made brick employed. The corners of the building are not right angles but are as follows:

Northwest corner	88° - 47'
Northeast "	91° - 04'
Southwest "	91° - 11'
Southeast "	88° - 48'

The walls have no footings and are laid in English bond with the one exception found in the south wall where a soldier course ie laid as the bottom course.

The elevations of the corners under the brick course are:

Northwest	corner	5'-3"	above	mean	sea	level.
Northeast	"	5'-3"	"	"	"	"
Southwest	"	4'-11½"	"	"	"	"
Southeast	"	4'-9"	"	"	"	"

The elevations of the standing walls vary from 9'-8" on the northwest side, the highest point, to 5'-5½" on the southeast, the lowest.

The upper brick courses are damaged and discolored by fire to such an extent that the brick and mortar are of the same neutral color. The mortar joints between the upper coursee are loose and the bricks can be lifted up one by one without the mortar adhering to them.

Inner walls of main foundation (partitions): The two partition walls are nine inches wide and are laid in English bond. Both partitions are bonded into the walls they intersect. The partition running from north to south ie laid over the solid clay bed while the one running from east to west is laid over the paving of the western unit. This latter partition, however, is bonded in with the partition running from north to south. The only explanation that can be given is that during the construction of the north to south partition the intereection of the east to west partition was anticipated and headers were left out for the joining of the future wall.

The brickwork of the inner walls was in much poorer condition than that of the main walls, probably as a result of the intense fire in the center of the building. The south end of the north to south partition was demolished to the paving level. The upper courses of the east to west partition are out of line and have deviated from their original position.

Description of Addition to the Main Building: Under the state highway and on the south side of the main foundation there was uncovered a brick foundation, undoubtedly of a light structure. On one end this foundation wall was built against, but not bonded in with, the main wall 11'-4½" east from the southwest corner, while the other original end of the wall was not found. It may have been destroyed during the road construction. The brick size and color are identical with those used in the main wall. The bond is also English.

The average brick size is 2 3/8" x 4½" x 9". The hardness varies with the color. The orange-red brick is soft and the red-purple is hard.

The mortar is similar to that used in the main foundation.

B. Building Materials Recovered from the Foundation and its Environs.

Brick:

The average brick size including those employed for paving is 2 3/8" x 4¼" x 9".

These brick are of local origin. Often they were made on the building site or in the immediate vicinity because good material (loamy clay) was easily found, the bricks were easy to make and the fuel (wood) was secured cheaply.

Dutch Brick:

This type of brick is irregular in shape and very hard. Their average size is 1¾" x 3" x 6¾". In color they are yellow-green and pink. See drawing sheet No. 8.

Probably they were imported from Holland. It is interesting to notice in many cases that the texture of the brick inside (when broken) is much different from the face sides. It appears that round pebbles about ½" in diameter were inserted into the bricks while they were being formed, probably to keep the bricks from deviating from their shape in the process of burning. The pebbles are fused with the clay due to an intense heat such as that generated by coal. Sea coal was used as a fuel in Europe at that time for firing bricks and tiles; whereas, in this country coal did not come into use for firing kilns until much later and wood was preeminemtly used as the fuel.

Roofing Tiles:

Two types of roofing tiles were found, the normal type and the flat type. See Drawing sheet No. 8.

The normal tiles, probably used as ridge tiles, were found in too fragmentary form to determine their original size. They are much heavier than the flat tiles though of similar clay (red-orange). On the edge of the tile is a nib for locking the next overlapping tile.

The flat roofing tiles are rectangular in shape, flat with two holes about 4" apart obviously for nails or pegs for securing the tile to the roof. The width is 6¼" and the thickness 5/8". The length could not be ascertained. According to Statute 13, Elizabeth, 1571, the dimensions of plain tile (flat tile) shall be 10½" x 6¼" x 5/8" in thickness. It is probable that the tile found in the foundation in Sub-unit 39 was originally the same size as the English, the specifications of which are given above.

However, the tile from the foundation in Sub-unit 39 differs from the English in hardness and color. The English tiles are made of a tough clay which after burning produces a red-purple, non-porous terra-cotta. The tiles used in the building (Unit A, Sub-unit 39) are very porous, and made of ordinary clay similar to that used in locally made brick. It seems likely that these tiles were made of local material by English artisans.

Floor Tiles:

These were made of tough clay and well pounded down in the process of making as may be seen from the section of a broken tile. The face side is smooth while the bottom is rough with sand adhering to it as if the tile had been placed on a sand bed after it had been formed by hand. The color is even throughout; orange-red and red-purple. The size is 1½" x 8¾" x 8¾". See Drawing Sheet No. 7.

Dutch Tiles: Two whole examples and many fragments of the early seventeenth century Dutch faience tiles were found in and around the foundations. Their average size is 5" x 5" x 3/8" thick. They are slightly bevelled back from the face side. These tiles are painted in blue monochrome with an isolated figure design. See Drawing Sheet No. 9.

It was found from references on early Dutch faience products that tiles of this type were in fashion between 1530 and 1670 and generally used for the embellishment of fireplaces.

Slate:

One good example of roofing slate was salvaged which was not damaged by the fire. One end is rounded and the other ragged and broken off where the nail holes may have been. The color resembles that of Welsh slate.

Information concerning the origin of the slate used in this country during the seventeenth century is very meager. From the number of early English buildings covered with slate and from records concerning the discovery of large slate quarries, we know that there must have been great quantities of slate on the market. It is quite possible that it was exported to the colonies and that the slate which was found in the foundation in Unit A, Sub-unit 39, was imported from England. See Drawing Sheet No. 7.

Mortar:

It is made of oyster shell lime and yellow sand of a poor grade (too much clay). Several samples of mortar not damaged by the fire were taken for study; and upon examination proved to be soft, coarse and poorly proportioned with sand.

Local make.

Plaster:

Made of oyster shell lime mixed with white sharp sand, this plaster was applied directly on the brick wall or on wooden lath in case of frame construction (a quantity of imprints of wooden lath found on pieces of plaster). No examplea of colored plaster found.

Local origin.

Hardware:

Among interesting objects found was one section of a wrought iron window casement frame on the south side of the foundation. Wrought iron casements came into use in the sixteenth century as an improvement for ventilating rooms. The overall size of the section found is 1' - 3/8" x 2' -1 1/8". See Drawing Sheet No. 4.

Three types of hinges were discovered near the foundation: One, H-shaped, Tudor in style, with perforated ends; second, a butterfly; and the third, a strap hinge. The first two were undoubtedly used in the interior and the last may have been used for an outside door.

Lead:

The lead "Came" of "H" cross section was used to secure in place the small size window panes, called quarries.

English origin.

Glass:

Diamond-shaped quarries held by leaded muntins, ("came") are like seventeenth century English leaded glass. The sidea of this glass are 3 9/16" and the acute angles are 78°. Found in two colors, olive-green and white. The olive-green glass is thin and translucent; the white glass is thicker than the green and transparent. See Drawing Sheet No. 9.

The origin of both kinds is probably English.

Frame Construction:

The house built over the brick foundation was of frame construction. No evidences or any detail were found to indicate that the house was built of brick. Moreover, we found large amounts of charcoal probably from burned structural members of the house, such as posts, girts, summers, etc. A number of hand-made wrought iron spikes which were used for spiking wooden structural members large in section (in place of pegging) were discovered as well as a quantity of hand-made nails in five sizes; however, the predominating size was one used for lathing. We found a large number of imprints of wooden lath or pieces of plaster. As a rule plaster was applied directly on brick walls and in order to plaster frame walls the lath was applied to hold the plaster intact.

Two Family House:

As the basement is divided by brick partitions into two independent parts, eastern and western, with no circulation between them, the house probably was built for two familiee. Each part of the basement has an entrance to it, namely; one on the south side of the eastern part, one on the west side of the western part. The size of each part allows us to assume that there may have been two rooms on the first floor for each family.

Two End Chimneys:

The house possibly had two end chimneys, No solid chimney foundations were found except some brick remains on the west side and some brick debris on the east side. (See Plan drawing note). In the course of excavation of the east area, which is surrounded on the drawing by a dotted line, a part of a fireplace jamb was found in the brick debris and in the layer about 4" above the paving, there was discovered a number of fragments of Dutch faience tiles, which are described in the section of this report on building materials. Since it is known that these Dutch faience tiles were generally used as a means of embellishment in or around fireplaces, it can be said that the original chimney stack on the east end stood within the indicated area or nearby.

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